

Datasheet for ABIN1672761

Prolactin ELISA Kit[Go to Product page](#)**1** Image**1** Publication

Overview

Quantity:	96 tests
Target:	Prolactin (PRL)
Binding Specificity:	AA 32-228
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse Prolactin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (citrate)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: L32-C228
Specificity:	Expression system for standard: E.coli Immunogen sequence: L32-C228
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	Prolactin (PRL)
Alternative Name:	PRL (PRL Products)
Background:	<p>Protein Function: Prolactin acts primarily on the mammary gland by promoting lactation.</p> <p>Background: Prolactin, also called PRL, is a protein that in humans is encoded by the PRL gene. This gene is mapped to 6p22.3. This gene encodes the anterior pituitary hormone prolactin. It may play a role in cell survival by suppressing apoptosis, and it is essential for lactation.</p> <p>Prolactin also acts in a cytokine-like manner and as an important regulator of the immune system. Prolactin has important cell cycle related functions as a growth-, differentiating- and anti-apoptotic factor. As a growth factor binding to cytokine like receptors it has also profound influence on hematopoiesis, angiogenesis and is involved in the regulation of blood clotting through several pathways.</p> <p>Synonyms: Prolactin,PRL,Prl,</p> <p>Full Gene Name: Prolactin</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	19109
UniProt:	P06879
Pathways:	JAK-STAT Signaling , Peptide Hormone Metabolism , Response to Growth Hormone Stimulus , Protein targeting to Nucleus

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Plate:	Pre-coated
Protocol:	mouse Prolactin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Prolactin has been precoated

Application Details

onto 96-well plates. Standards(E.coli, L32-C228) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Prolactin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse Prolactin amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL mouse Prolactin standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, citrate) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse Prolactin standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 1490, Standard deviation: 67.05, CV(%): 4.5
- Sample 2: n=16, Mean(pg/ml): 2929, Standard deviation: 158.2, CV(%): 5.4
- Sample 3: n=16, Mean(pg/ml): 4543, Standard deviation: 177.2, CV(%): 3.9,
- Sample 1: n=24, Mean(pg/ml): 1272, Standard deviation: 99.22, CV(%): 7.8
- Sample 2: n=24, Mean(pg/ml): 2683, Standard deviation: 153, CV(%): 5.7
- Sample 3: n=24, Mean(pg/ml): 4726, Standard deviation: 246, CV(%): 5.2

Restrictions: For Research Use only

Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

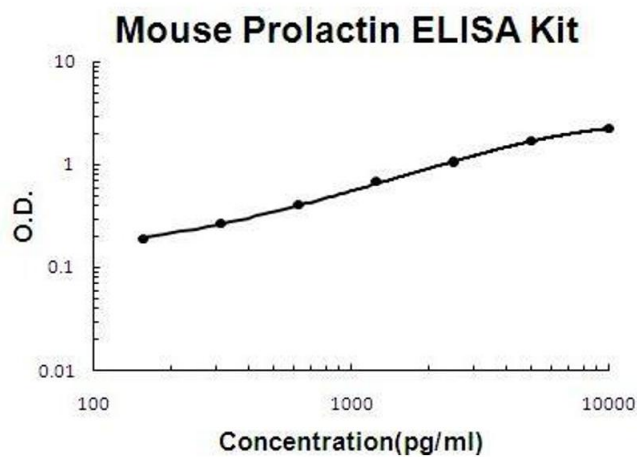
Storage: -20 °C, 4 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months

Publications

Product cited in: Xia, Qi, Zou, Yao: "Influenza A(H1N1) vaccination during early pregnancy transiently promotes hippocampal neurogenesis and working memory. Involvement of Th1/Th2 balance." in: **Brain research**, Vol. 1592, pp. 34-43, (2015) ([PubMed](#)).



ELISA

Image 1. Mouse Prolactin PicoKine ELISA Kit standard curve